



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2A1 BYPASS RATIO: 5.1
 UNIQUE ID NUMBER: 2GE036 PRESSURE RATIO (π_{c0}): 30.5
 COMBUSTOR: 1862M39
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 257.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	2.7	28.9	49.2	8.2
AS % OF ORIGINAL LIMIT	13.7	24.5	48.7	44.9
AS % OF CAEP/2 LIMIT (NO _x)			60.8	
AS % OF CAEP/4 LIMIT (NO _x)			72.3	
AS % OF CAEP/6 LIMIT (NO _x)			81.9	
AS % OF CAEP/8 LIMIT (NO _x)			96.1	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.453	0.05	0.05	26.55	7.0
CLIMB OUT	85	2.2	1.989	0.05	0.04	20.45	4.7
APPROACH	30	4.0	0.651	0.12	2.05	12.43	0.0
IDLE	7	26.0	0.201	1.59	19.76	4.68	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			835	536	6532	11514	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				4	4	4	4
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				2.1	25.4	44.7	7.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.2	1.2	0.3	0.7
RANGE (D _p /F ₀₀ in g/kN, or SN)				1.94-2.45	24.3-27.1	44.3-45	6.1-7.8

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.6-98.2
TEMPERATURE (K)	279-293
ABS HUMIDITY (kg/kg)	0.00457-0.00743

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: CF6 Eval Engineering
 TEST LOCATION: Site IIIB, PTO Peebles
 TEST DATES: 13/01/1995-17/01/1995

REMARKS

1. Ref GE report TM95-17.
2. Engine S/N 704/233 & 704/234
3. 1862M39 combustor

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)